

CENTERVIEWS

Air Force Center for Engineering and the Environment | Lackland AFB, Texas

2010 Vol. 16, No. 1

MILITARY MUNITIONS RESPONSE PROGRAM

**FENCE-TO-FENCE APPROACH
RETURNS THOUSANDS OF
ACRES TO UNRESTRICTED USE
PAGE 18**



**ALSO IN THIS ISSUE:
CONTINGENCY CONSTRUCTION ORCHESTRATES
\$1 BILLION PROGRAM TO DEVELOP STRATEGIC
HUB IN AFGHANISTAN
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U.S. AIR FORCE



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Suggestions and criticisms are also welcome.

On the cover: The Military Munitions Response Program focuses on munitions cleanup at training facilities and former ranges. These 750 pound demo bombs were removed from Barksdale AFB, La. Photo courtesy of FPM Remediations, Inc.



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THE LEED® IS BEING LED

By Dennis Firman



Dennis Firman

Lead the LEED®* or change our name. These words were part of my vision statement for the Air Force Center for Engineering and the Environment (AFCEE) when I joined the organization in November 2007. At the time, we had just changed our name from the Air Force Center for

Environmental Excellence and had taken on additional responsibilities for military construction. I recognized that sustainability of our nation and our environment was all about the delicate interface between construction and the environment, and I saw the combination of the two missions as a golden opportunity for AFCEE to become a global leader in sustainability.

As my October retirement date approaches, my vision for the Center has only evolved and solidified. We are now embracing sustainability in everything we do. The Air Force has recognized sustainability as a major initiative and embraced it. To use the words of Eldon Hix, our Technical Support division chief, we are “leading from the middle.”

I feel good about my time here. My primary goal when I came was to work toward institutionalizing the organization, and I am happy to say that we have already accomplished many of the tasks necessary to meet this goal. We diagrammed all of our processes and are providing employee training and feedback options. We received approval to enhance our Management Execution and Tracking system and will now be able to provide fields of information to track customers’ work from the time work is submitted until we close the project out. This will help us drive transparency into everything we do.

The numbers prove that we’ve done great things. Bringing centralized military construction to AFCEE has given the Air Force better execution years than ever before. We have had hundreds of millions of dollars in demonstrated savings from centralization of

environmental restoration here. We have recognized subject matter experts in thirteen areas and the Air Force routinely calls upon that capability. We have embraced sustainability, and it is influencing everything we do.

I’d like to take a moment to highlight just a few of our accomplishments over the past three years:

- We have led the Air Force in advancing and institutionalizing sustainable design and development (SDD) by conducting numerous workshops to explain SDD policies and the LEED® certification process.
- Our Environmental Management System (EMS) principles have served as the basis for sustainability practices throughout the Air Force.
- Our Environmental Restoration Program Optimization (ERP-O) reviews are ensuring that sustainability concepts are employed in our remediation systems, with a focus on implementing low energy / passive remediation systems.
- Since 2007, the AFCEE Broad Agency Announcement (BAA) has increased funding for innovative technologies from \$500K to \$6M in 2010, and our annual Technology Transfer Workshops have increased both in participation and scope.
- Our technical experts have provided significant input in the development of the Department of Defense’s Strategic Sustainability Performance Plan (SSPP).
- We developed numerous tools and guidance to assist in implementing sustainable practices, including the Sustainable Remediation Tool (SRT) and the Sustainable Sites ToolKit.
- We centralized management of the AF Environmental Restoration Account program and developed a strategy to achieve remedy in place for sites across the AF.
- We completed construction of the first building in the Department of Defense to achieve the LEED® Platinum level: the fitness center at Tyndall AFB. We also completed construction of the C-17 hangar at Travis AFB which was the first AF hangar to achieve the LEED® silver rating.

- We contracted for LEED® certification for 46 percent of eligible FY09 MILCON projects, exceeding the FY09 AF goal of 5 percent.
- We incorporated energy-saving features and appliances into our housing privatization initiatives, with many homes being eligible for LEED® certification, and we are assisting project owners in establishing programs to encourage future sustainability practices.
- We developed many aspects of the “Sustainable Communities” methodology, as part of a collaborative effort to address a more holistic installation-based perspective on sustainability across the Army, Navy and Air Force.

I think the cornerstone of these and future sustainable achievements is, and will continue to be, embracing the Air Force core values of *Integrity first*, *Service before self* and *Excellence in all we do*. Everyone needs to pinpoint the priorities in their life and not compromise on them. I believe one of the most important priorities for a person, particularly a leader, should be integrity.

Integrity first. I see integrity as the place where what we think, say, promise and do collide. Organizational integrity can be difficult for people to get their minds around. People understand personal integrity. It’s something you bring to the workplace. It’s based on the way you were raised – your understanding of right and wrong. If you do something that society sees as unacceptable, you can lose your integrity. Organizational integrity is not like that. Organizational integrity grows and evolves. If there is a problem within the organization, you can go to the individual responsible and the organization’s integrity is not affected. Sustainable development is an organizational integrity cornerstone for the Air Force.

For AFCEE’s organizational integrity to continue to grow and strengthen, the organization must be ready to meet future challenges and continue to work on improving business processes and delivery. I see the Air Force moving further toward centralization of all of its programs to meet national budget deficits, and I think

the field operating agencies across the Air Force will continue to grow for that very reason.

To demonstrate *service before self*, AFCEE must continue to show professionalism in all activities and offer exemplary service. Rules must be followed and respect must be shown for colleagues, customers and stakeholders. Do not become so entangled in the day-to-day challenges that you lose sight of the big picture.

The organization was built on a foundation of excellence, and has continued to demonstrate *excellence in all we do*. AFCEE may have lost the word “excellence” in our name, but it has not been lost from AFCEE’s mission and vision for the future. AFCEE must remain the center for excellence and expertise for the Air Force and the world at large. You can and are influencing sustainability throughout the world, and you are building a sustainable Air Force and a sustainable nation in the process.

Soon you will be under the leadership of a new director. I am confident that he or she will epitomize these core values, encourage them throughout the organization and help the name of AFCEE continue to be synonymous with excellence.

Our mission and goals will continue to focus on sustainability. Our move to Building 171 has presented new opportunities to embrace sustainability and practice what we preach. We are aiming for all future construction to be LEED® certifiable, and for our environmental remediation systems to further utilize green practices. We want to continue to focus on energy reduction in every aspect of what we do.

When I leave in October, I will be heading east on Interstate 10 to the small fishing village on the Chesapeake Bay where I grew up. I am leaving confident in the knowledge that AFCEE will continue to remain a center of excellence, and will continue to lead the LEED® and walk the talk.

* LEED: *Leadership in Engineering and Environmental Design* is a rating system established by the US Green Building Council and is used to certify green building construction. □

The Acquisition Playing Field

By Dennis Firman

Imagine for a moment that your team is one game away from winning the World Series. They have spent countless hours perfecting their pitching, building their speed, and increasing accuracy. They have endured strenuous practices, are comfortable with the plays, and have perfected the art of working as a team. Only hours away from the big game, a call comes in. The rules have been changed. The team is questioning if they will be able to remain competitive. They are unsure of their new roles. Can they still win?

That's kind of how things have been in the world of contracting acquisition. Back in AFCEE's early days, contracts were awarded based on a "fair opportunity" method, which allowed AFCEE to solicit proposals from one or multiple contractors. This could be misconstrued to mean AFCEE had the ability to consider only one contractor for a project, but that really wasn't the case. Contracting officers were required to consider all potential awardees, assessing their technical and management capabilities, past performance, availability of resources and bonding, and their proximity to the proposed work. They looked at the negotiated labor and indirect rates for each contractor and compared these to an independent government estimate. After careful analysis, the contracting officer would determine which contractor represented the best value and would issue a request for proposal (RFP) from the contractor that met the proposed criteria. Everything was documented and there were numerous levels of management and legal review and approval required any time multiple sources were not solicited.

In 2008, changes in acquisition policy required all contracts over \$100K to be solicited on a competitive basis, giving every prospective contractor an opportunity to bid. In a nutshell, AFCEE's rules had changed. The increased number of proposals to be considered for the task orders exceeding the threshold caused AFCEE award times to increase substantially. Even task orders that fell below the threshold were affected by the increased workload requirement. Longer award times increased potential for fines and penalties. Some

contractors were reluctant to pay the high price to develop proposals which may or may not be awarded due to the increased competition.

The "go-to" team, which had long been hailed as a world leader in construction and environmental cleanup, the ones who could "get it done," had hit a stumbling block. We weren't the same organization we had been a few years earlier. Why hadn't we been able to take the new rules and hit the ground running?

Murphy's Law states that if something goes wrong, it will always happen at the most inopportune time. We had just taken on the new missions of military construction and environmental restoration for the entire Air Force, and our workload had increased exponentially. As we adjusted to the new shoes we had to fill, we were faced with completely rethinking our way of doing business.

But things are starting to turn around. We are acclimating to this new environment and are using the challenge as an opportunity to further enhance our capabilities. In the last two years alone, much has been accomplished. A clearinghouse has been instituted to determine when and how work will be accomplished, driving transparency into our work processes. We have put a lot of time and attention into mapping all of our contracting vehicle processes, ensuring that standards are followed and allowing us to identify and prioritize areas where we can improve. We have conducted "boot-camps" that capitalize on our in-house expertise and provide training to employees AFCEE-wide. Our efforts are paying off and our response times are already improving. Upcoming enhancements to the process, like implementation of our updated tracking system, will allow us to track process times at each step, and allow identification of potential bottlenecks and additional streamlining of the process.

We are not the same team we were before the rules changed, but that is not a bad thing. As we learn the new rules and capitalize on our new strengths, we are rising from this transformation stronger, smarter and even more capable of providing our customers and contractors with top-notch service and attention. We are still the "go-to" team. □

AFCEE begins construction on first ever CYBER WARFARE INTELLIGENCE CENTER



By Summer Allen

Lackland AFB, Texas – The Air Force Center for Engineering and the Environment began construction on a new 38,000 square foot cyber command center.

The facility will be the home for the 68th Network Warfare Squadron and the 710th Information Operations Flight currently located at the former Brooks AFB. Scheduled for completion in early 2011, it will be the pioneer command center for cyber warfare.

Officials from the 67th Network Warfare Wing held a groundbreaking ceremony in March to officially commence construction.

"This building will be the first of its kind in the nation, as well as the first step in the new warfare – cyber warfare," said Col. Bradford Shwedo, commander of the 67th Network Warfare Wing.

Air Force officials chose Lackland AFB to be the hub of cyber command operations. One reason they chose Lackland AFB was because of its proximity to other cyber-related commands such as NSA's Texas Cryptologic Center; the Air Force Intelligence, Surveillance, and Reconnaissance Agency; the 67th Network Warfare Wing; the Joint Information Operations Warfare Command; and the Air Force Cryptologic Support Group.

The facility's construction is one of the base realignment and closure projects, also known as BRAC, being managed and executed through AFCEE and

constructed by TolTest, Inc.

The BRAC commission is a federal entity set up to review the assets and property of military installations, close excess bases and realign operations and resources to maximize tax payer dollars.

The facility will serve as an office building for 400 employees. Some features include a sensitive compartmented information facility, also known as a SCIF, a more modernized operational area, a closed-in patio, and an additional 4,000 square feet for a 100-space parking lot and a new two-lane road.

The building will also be designed and constructed in accordance with Leadership in Energy and Environmental Design requirements. LEED® is a goal-oriented approach to the design, construction, and operation of "green" buildings. LEED® certification requires the facilities built have environmentally friendly features, use recyclable materials when possible, and use energy efficient lighting and appliances.

"We are excited about the opportunity to design and construct the Intelligence Operations Center for the Air Force Reserve Command and the Air Force Space Command, which will be essential to the execution of their cyber warfare capabilities," said AFCEE project manager Mark Stough.

The author is an AFCEE/EXH contractor. □

Air Force agencies publish guidance for using their “in house” expertise for construction projects

By Summer Allen

Lackland AFB, Texas - Air Force civil engineers now have a clearer path to follow when seeking assistance for executing their construction projects on base.

The Air Force Center for Engineering and the Environment, in conjunction with the Air Force Civil Engineer Support Agency, released guidance in April on their process of managing and executing sustainment, restoration, and modernization construction projects, also known as SR&M.

“We want to let the base’s civil engineering department know that we are here and we can help them out,” said AFCEE construction branch chief Ben Kindt. “Sometimes the base does not have enough resources or manpower to complete all necessary projects, and that is where we can step in.”

The joint guidance document spells out the process for using AFCEE and AFCESA to handle SR&M projects. It also clarifies the types of SR&M that can be handled by each agency. AFCEE handles vertical SR&M and environmental projects while AFCESA handles horizontal SR&M and energy projects.

Vertical SR&M pertains to work done on the building itself and anything inside, while horizontal deals with work outside the building including runways, roads, utilities, and parking lots.

“We want to let our customers know that AFCEE has the appropriate expertise and is poised and ready to help the bases with their SR&M projects,” said AFCEE project manager Micah Shuler.

According to Shuler, there are a number of reasons why it is beneficial to use AFCEE to handle SR&M projects. AFCEE’s customers can expect to see project status, funding amount, and timeline for all projects currently being executed due to their open checkbook policy.

“Possibly the biggest advantage in using AFCEE for SR&M projects is that it allows the base to get more done with less. When you use AFCEE for your high dollar projects, it reserves your contract capacity,” Shuler said.

AFCEE has three contracting options available for

SR&M projects: the heavy engineering repair and construction contract, also known as HERC, which cover renovations, minor construction, demolition and other SR&M projects; architect-engineer services, or 4P A-E, including designs, studies, investigations, analyses, and Title II; and advisory and assistance contracts, also known as GEITA, covering construction quality assurance, programming and planning support, and construction management.

AFCEE and AFCESA accept SR&M projects through a clearing house process. In this process, project managers review, prioritize, and approve SR&M projects submitted for execution. The clearing house verifies project alignment with the agency’s core competencies and recommends a course of action for projects that do not fall within their scope of service offerings.

AFCEE has experience executing SR&M projects. To name a few recent projects, AFCEE has renovated the old clinic at Randolph AFB, with renovations and improvements totaling over \$10 million. Some of the improvements included new lighting, skylights, expanded waiting room areas, new furniture, flooring, signage, and landscaping.

AFCEE is also in the process of renovating dormitories at Dover AFB, converting the old 4-room, 2 bathroom units floor plan to all private rooms with an adjacent private bathroom. This \$7.2 million dollar project is scheduled for completion in Aug. 2010.

AFCEE will also be handling the design of a \$9 million renovation project at Randolph AFB on the Taj Mahal building, the most famous Air Force structure. Built in 1929, this building is the home of the 902 Flying Training Wing Headquarters as well as the base commander. The inside plumbing, electrical, air conditioning, and communications equipment will be modernized and replaced, while preserving the historical, 1920’s vintage appearance.

To find out more information about AFCEE’s SR&M program, visit AFCEE’s Web site at www.afcee.af.mil.

The author is an AFCEE/EXH contractor. ■

Randolph's newest building is as "good as gold"

By Summer Allen

The employees at the Air Force Personnel Center, Civilian Personnel Office, at Randolph AFB now have a new building to call home. The Air Force Center for Engineering and the Environment (AFCEE) managed the construction for this new office building that was completed late July.

This \$10.5 million, 36,000 square-foot facility was a project under the Base Realignment and Closure Act and will host approximately 150 staff from various Air Force commands.

This is the first building at Randolph AFB to achieve a Gold rating in accordance with the Leadership in Energy and Environmental Design (LEED®) standards.

A Gold rating is the second highest LEED® rating a building can achieve. The ratings are assigned by the U.S. Green Building Council and are based on the number of environmentally friendly features incorporated into the building's design and construction. The more green features that are used, the more points the project receives, resulting in a higher rating.

"One of the biggest reasons we were able to achieve such a high LEED® rating was because we were able to reuse and recycle 96 percent of the former thrift shop

building, Bldg. 662, after demolition. This building stood in the footprint of the new CPO building. This wood-constructed building dated back to the WWII era. When we demolished the building we were able to reuse and save a substantial portion of the wooden paneling and other materials," said AFCEE project manager Mr. Nick Alino.

Some other notable green features are high-efficiency heating, ventilation and air-conditioning systems; controls that switch off lighting in unoccupied rooms and the use of finishes that do not emit harsh chemicals; an exterior designed to maximize day lighting inside the building and roof overhangs to shade windows and cut down on solar heat; a roof that reduces solar absorption; and xeriscape landscaping.

Another amenity is that the building has showers and changing rooms to encourage bicycling, walking and alternative means of transportation.

Air Force officials held a ceremony recently to inaugurate the new building as Blanchard Hall, dedicated to Mr. Roger M. Blanchard, the first civilian executive director of the Air Force Personnel Center.

The author is an AFCEE/EXH contractor. □



The Civilian Personnel Office at Randolph AFB was completed in late July and is the first building on the base to be certified LEED® Gold.

Contingency construction orchestrates \$1 billion program to develop strategic hub in Afghanistan

By Maj Clifford Theony, Maj Patrick Suermann, and Capt Daniel Diaz

A FCEE's Contingency Construction Division (CX) is deep into a \$1 billion construction program aimed at transforming the Camp Bastion/Leatherneck/Tombstone (BLT) Joint Operating Base (JOB) into a strategic and tactical hub, ultimately capable of supporting over 25,000 NATO personnel.

BLT is currently the hub for the Marine and UK Forces supporting the Forward Operating Bases (FOBs) in the region and is located in Helmand Province, Afghanistan, where the insurgency's tight hold on the territory has been the focus of recent security operations. NATO forces, spread throughout the Helmand River valley, are supporting the Afghan National Army (ANA) in their Counter Insurgency Operations (COIN) in an effort to ensure a secure future for Afghanistan and ultimately allow them to resume control of the country.

In December 2009, US President Barack Obama committed an additional 30,000 troops to Afghanistan, 9,000 of which are currently slated to come through BLT.

On-Going Construction

Currently AFCEE has eight active construction task orders with 21 active projects. The largest is a \$205 million airfield project at Camp Bastion which includes a new 11,500 foot runway capable of landing C-5 and 747 aircraft, a strategic parking apron for two strategic (C-5) and four tactical (C-130) aircraft, and a rotary wing parking apron for 15 CH-47 or V-22 aircraft. This project, awarded to Lakeshore Engineering Services (LES), is the largest single task order AFCEE has ever awarded for construction. The parking aprons are scheduled for completion in summer 2010 and the runway is expected to be operational in early 2011.

The new expanded runway will support larger aircraft and reduce the need to bring in supplies by convoy from Kandahar, located 80 miles west of BLT. Despite the relatively short distance, a convoy from Kandahar to Camp Bastion typically takes ten or more



Strategic ramp under construction

hours to complete due to road conditions and security considerations.

"What this does (the new airfield) is enhance the capability of the war-fighter in Afghanistan to run operations, both logistically as well as operationally," Colonel Terry Watkins, AFCEE CX division chief, said.

AFCEE and LES have continued construction while overcoming several challenges.

One difficulty has been maintaining a secured construction perimeter in coordination with the USMC Base Defense Operations Center (BDOC) and UK Force Protection Joint Operations Center (JOC). The airfield project includes over 10 km of new perimeter fence line, more than doubling the land area of the existing airfield. For the first nine months of the project, the contractor and AFCEE personnel were living 'outside the wire' to facilitate the base expansion. As a result, the project experienced several theft and security incursions which required responsive action by LES's security force, in coordination with the BDOC and JOC, to eliminate further incidents and unacceptable risks. Also, since Bastion Airfield's Airfield Operating Authority is a UK responsibility, the project management team was required

to closely coordinate the movement of the UK Force Protection perimeter to the constructed perimeter fence, a task which was completed on March 31, 2010.

Another hurdle has been the continuous coordination with the UK and USMC to ensure construction does not interrupt sorties for the over 150 fixed-wing and 350 rotary-wing air movements occurring each day on the existing airfield. The original airfield consists of a 7,000 foot runway with just one parking 'loop' and no suitable parking apron for fixed wing aircraft. The Marines operate over 50 rotary wing aircraft from an AM-2 mat apron, located in the footprint of the northern end of the runway. Upon completion of the new aprons, AFCEE will coordinate the move of the USMC aircraft so construction can begin on the runway project.

Procurement of construction materials can also present a challenge.

"Afghanistan is a difficult place to build things," Col Watkins said. "We have some materials that we can find locally, but most of the materials that are used on the job sites come through Pakistan. The ability to get resources requires a lot of effort because of the lack of infrastructure."

A second project currently completing construction is the 7th Commando Kandak Compound by Environmental Chemical Corporation, International (ECC-I) at Tombstone FOB, funded for execution by the Combined Security Transition Command-Afghanistan (CSTC-A). This project will provide a semi-permanent camp for 1,000 ANA Commandos and consists of officer and enlisted barracks, a dining facility (DFAC), shower/shave facilities, Embedded Training Team (ETT - US Special Operations Forces) barracks, bunkers, roads and all associated



Brigadier General Gary S. Patton meeting with the 7th CDO Commander at the Kandak site.

infrastructure. This \$11 million project is the first of dozens of such sites projected to be constructed in Afghanistan.

Projects Pending Award

The remainder of the \$800 million in construction is projected to be executed over the next two years. Ten task orders totaling \$375 million, excluding a possible \$100 million in FY 2010 supplemental projects, are awaiting construction start in FY 2010. These projects include a March 2010 award for the second phase of airfield construction to comprise 21 unarmed rotary wing parking spots, 14 armed rotary wing parking spots, 24 close air support (CAS) parking spots, and 800,000 gallons of fuel storage. Upon completion of these projects, construction will begin on an expansion to the strategic airlift apron, expanding capacity to four strategic and four tactical aircraft including a cargo and passenger handling facility. Following this, a hot cargo pad and new eastern entry control point, including four km of roads, will be constructed. For the airfield, there will also be an expansion of the CAS apron (12 spots) and construction of an intelligence, surveillance, and reconnaissance apron (20 spots) and associated maintenance facilities. In addition, a medical facility is slated to be constructed as an expansion to the UK Role III facility on Camp Bastion.

On Leatherneck, there is a substantial amount of vertical and infrastructure construction planned for the remainder of FY 2010. Two 26,900 square foot Brigade Headquarters facilities were awarded. Currently out for solicitation is a contingency housing project to construct Re-Locatable Buildings (RLBs) for 2,970 Marines, one of several steps to move the Marines from tents to hard-walled facilities and improve quality of life. Also pending are awards for construction of a 4,000 person/meal dining facility (DFAC), pavement of three miles of roads, and installation of a water distribution system. Two million gallons of additional fuel storage will be constructed to support the hundreds of USMC tactical vehicles at Leatherneck. Later in FY 2010, a third Brigade HQ facility will be constructed along with a 6,000 person/meal DFAC and 'brick & mortar' contingency housing for 8,000 Marines. Also planned for award by the end of FY 2010 are sanitary and storm sewer systems.

FY 2011

Additional airfield and Leatherneck work is planned for FY 2011. Construction is planned for a new 11,500 foot parallel taxiway east of the new BLT runway as well as a KC-130 USMC refueler parking apron with four parking

spots. Also planned is another rotary wing parking apron with 18 Special Operations Forces parking spots. Leatherneck will also see another 4,000 person/meal DFAC, a wastewater treatment plant, and 3,000 Marine 'brick & mortar' contingency barracks constructed.

'Afghan First' Program

When first launched in early 2006, one of the key goals of the Afghan First Program was to "increase procurement within Afghanistan of supplies for civilian and military activities...use Afghan material in the implementation of projects, in particular for infrastructure...and increasingly use Afghan local national implementation partners and equally qualified local and expatriate Afghans" (*The Afghanistan Compact, 2006*). AFCEE, along with the AFCEE Heavy Engineering and Repair Contractors (HERC), are supporting these initiatives in their MILCON efforts at BLT JOB through the employment of skilled and unskilled Afghan tradesman on the project sites.

LES is employing approximately 880 Afghan local nationals (LNs) on the Airfield Phase I project, 57 of which are skilled craftsman such as carpenters, mechanics, masons, cooks, and electricians and paving equipment operators. Additionally, ECC-I is employing 327 LNs, 75 of which are performing as skilled laborers including masons and heavy equipment operators.

While often mutually beneficial, use of LNs on the job sites can present challenges as well. There is less availability of skilled labor in areas of reduced population, such as Camp Bastion, which means training will need to be provided or labor will need to be brought in from other countries.

"There are certain capabilities, we just have to recognize who has which capabilities," Col Watkins said.



Connecting link taxiway to existing runway on strategic ramp.



North touchdown paving for new runway behind the existing, temporary Marines rotary wing ramp.

"The Afghans are incredible masons, so we can rely on them to do great mason work. Where they might have issues with electrical or that type of thing, we may find that they can only do portions of the work or that they have to be closely supervised or trained to meet the quality that we demand."

Another potential problem is the Taliban's influence, which can inhibit LNs from coming forward due to a fear of repercussion.

Overcoming challenges such as these, and supporting the COIN operation, is central to strengthening the Afghan-NATO forces development partnership and promoting the strategic goals set forth by the ISAF/CC to combat the insurgency fueled by the Taliban and Al Qaeda. From a COIN perspective, endorsement of the Afghan First Program provides economic support for LNs and helps alleviate an atmosphere of isolation between the NATO military bases and the surrounding villages, all part of an effort to build trust and reduce the probability for potential insurgent activities.

Maj Patrick Suermann is the AFCEE-A Camp Bastion Officer-in-Charge. Maj Clifford Theony is the AFCEE MILCON & Minor Construction (CXM) Branch Chief. Capt Daniel Diaz is the AFCEE-A Project Manager. □



AFCEE completes its biggest housing project to date at Keesler AFB and sets bar high

By Summer Allen

Keesler AFB, Miss – In terms of size and sustainability, not many projects compete with the housing project at Keesler AFB, Miss. Officials say this housing project was the biggest and best housing the Air Force has ever built.

The Air Force Center for Engineering and the Environment was a key player in completing this massive project after the devastation of Hurricane Katrina in 2005. AFCEE contractors built a total of 1,028 new 3 and 4-bedroom homes for Keesler Airmen and their families.

AFCEE contractors applied construction practices used in commercial housing developments to rebuild the homes and the entire community, to include roads, parks and utilities.

“What made this project so successful was the way all involved in the project came together in a forum to discuss what needed to be done and how we could best tackle a project of this magnitude,” said AFCEE Project Manager Larry Trafton. We also had good lines of communication between all involved in the project, from the base support to the contractors.



New hurricane-resistant homes at Keesler AFB feature energy-saving features and the majority are LEED-certified.

“The exchange of new and innovative ideas resulted in streamlining processes and designing creative solutions and betterments for the base residents, despite an already tight construction schedule. The end result was they finished four months ahead of schedule,” Trafton explained.

Trafton also said 95 percent of the walls were pre-manufactured and trucked in to allow for faster construction. The contractor also provided a robust group of sub-contractors which were handpicked from all over the United States.

This housing project also showcases one of the highest “green” ratings throughout all Air Force housing projects. The majority of the new homes, 724 out of 1,024, are LEED-certified and all have energy star appliances, extra insulation, double-paned windows and energy saving lights.

In addition to the green features, the homes were built to withstand wind gusts of up to 140 mph, which is essential for the hurricane-prone area. There are also a total of 52 handicap units. The units are American Disability Association-compliant, built with lower cabinets, front door entry ramps, wide hallways, and a handicap bath.

Recently, Keesler officials held the last of two ribbon cutting ceremonies to inaugurate the new units.

“Our airmen love the beautiful new homes at Keesler. They are larger than most military housing and all three and four-bedroom homes come with garages. Some say it is the best housing they have ever seen and may never have it this good again,” said Brett Long, Keesler housing flight chief.

The author is an AFCEE/EXH contractor. □

AFCEE finishes large housing project at Edwards AFB

By Summer Allen

Edwards AFB, Calif.— The Air Force Center for Engineering and the Environment completed one of its last and largest U.S. housing projects at Edwards AFB. At a ribbon cutting ceremony, Air Force officials inaugurated the new, \$100 million, multi-phased housing project, 15 years in the making.

This project, spearheaded by AFCEE and constructed by Hunt Building Co., features a total of 291 new homes, three parks, two soccer fields, a tennis court, a basketball court, and picnic areas and benches. The last phase of the project was completed this past March, resulting in an improved quality of life for base residents.

The civil engineering team designed and built the new homes based on input from Air Force families, to include, but not limited to, more storage space, energy efficient appliances, and improved recreational areas.

“We always take into consideration what the customer wants,” said Edwards housing coordinator Ms. Jeanette White.

The new homes have environmentally friendly features to include energy star appliances, extra insulation, dual-paned glass windows, ceiling fans in every room, and Xeriscape landscaping, a drought tolerant landscaping necessary in the arid base climate.

Base civil engineer and 95th CE director James Judkins said completing this housing project was a base wide effort culminating with a ribbon cutting ceremony and an open house.

Maj Gen. David Eichhorn, commander of the Air Force Flight Test Center, was present at the ceremony.

“It’s a proud day for us and for the United States Air Force,” he said.

Another key player in this project was Col Jerry Gandy, 95th Air Base wing commander.

“This is a great day for Edwards AFB; this is a great day for our nation,” Col Gandy said. “To the contractors, subcontractors, civil engineers, and AFCEE: this is a great product you have delivered for us. This is absolutely incredible. What you have delivered today, for decades



Maj Gen. David Eichhorn, commander of the Air Force Flight Test Center, shares a few words at the ribbon cutting ceremony.



One of 20 senior officer's quarters built at Edwards AFB.

and decades, will support the families and help them deliver excellence for our nation.”

Construction experts say that this project is one of the best housing projects in the Air Force.

“This project was successful due to so many people working together as a team and bringing their expertise and experience to resolve issues and project delays,” said AFCEE project manager Micah Shuler. In fact, our team worked so well together we were able to finish 90 days ahead of schedule.”

The author is an AFCEE/EXH contractor. □

Privatized home honors past, present, and future Chief Master Sergeants of the Air Force

By Lisa Fisher

Increased living space, hardwood floors, and high quality fixtures are just a few of the features included in the privatized home of Chief Master Sergeant of the Air Force (CMSAF) James Roy. The newly remodeled CMSAF's home represents the balance between preserving Air Force history and adapting to meet current housing standards for Air Force families.

At the dedication ceremony at Joint Base Andrews in March, the Air Force honored the memory of Paul W. Airey, the first CMSAF, and underlined how the Air Force is working to preserve its heritage and unique sense of community in privatized housing.

"We are both honored and proud to have built this house for current and future leaders of the Air Force's enlisted family," stated Mike Dowling, Development Executive of Clark Realty Capital, LLC and the owner of the housing privatization project at Andrews.

The AMC East project was awarded two years ago as a partnership between the Air Force and Clark Realty Capital, LLC.

Before privatization, the CMSAF's home encompassed less than 2,000 square feet. Now, the home is over 3,415 gross square feet and includes hardwood floors, granite countertops, and other high quality fixtures.

As part of the project at Andrews AFB, new home construction and renovations on existing homes are underway for Airmen as well. All of the newly constructed homes include amenities such as Energy Star appliances and Corian countertops. The occupancy level



Unveiling of Commemorative Plaque (from left to right: Col Steven Shepro, Installation Commander; CMSAF James Roy; son of CMSAF Paul Airey, CMSgt (Ret.) Dale Airey; and Mike Dowling, Clark Realty Capital)

for the privatized homes at Andrews is currently around 94 percent.

Lt Col Michael Saunders, 316th Civil Engineer Squadron commander at Andrews, considers the success of the project to be attributable to the teamwork between the Air Force and Clark Realty.

"This is one of the Air Force's most successful projects due to the great relationships between the base and the Project Owner," said Lt Col Saunders.

The author is a financial management specialist with the AFCEE Housing Privatization division. ■

Housing privatization focuses on **building sustainable communities**



Solar Panels at Davis Monthan AFB

By Carrol Helms

Sustainability is a key objective of the partnership between the Air Force Center for Environmental Excellence's Housing Privatization division (AFCEE/HP) and housing project owners, who have united to ensure airmen and their families have access to safe, high-quality, affordable, and well-maintained homes. By minimizing the environmental impacts of internal operations, as well as those of the products and services provided in support of environmental sustainability, the Air Force aims to provide reliable housing to airmen and their families for years to come.

According to AFCEE's Environmental Management System (EMS) vision, sustainable development, or

sustainability, is defined as a means to plan, program, site, design, construct, renovate, operate, maintain, deconstruct, and remove facilities in ways that efficiently use energy, water, and materials; improve and protect built and natural environments; and provide long-term benefits for occupant health, productivity, and comfort. Sustainable development is also known by such terms as "green," "high performance," or "environmentally friendly."

Many project owners have already encouraged sustainability practices such as recycling and energy conservation through the use of energy efficient lighting, appliances, and climate control awareness. Additionally, project owners are ensuring sustainability concepts are included within their unit design plans. The plans include detailed project construction and

renovation features and specifically identify the energy saving measures the PO will incorporate. Typical measures consist of Low-E glazed windows, Energy Star rated appliances, programmable thermostats, ultra-low flow plumbing fixtures, natural gas water heaters, and pedestrian efficient neighborhoods to include such features as walk ways, jogging paths, and bike trails.

Some project owners are utilizing innovative ideas in an effort to reduce electricity usage and conserve natural resources.

The ACC Group II project at Holloman AFB, NM and Davis-Monthan AFB, AZ, owned by Actus Lend Lease (ALL), is partnering with Solar City (a solar panel installer and financier), Tucson Electric Power, National Bank of Arizona, and U.S. Bancorp Community Development Corp to utilize solar energy and reduce energy consumption.

The project is divided into two components: ground array and roof-based solar panels. The ground array will encompass 20 acres on Davis-Monthan AFB and will have over 3,600 concrete piers supporting approximately 45,000 solar panels in a solar array.

The roof-based project will see the installation of 36,000 solar panels on over 900 homes. It is expected these two systems will provide over 75 percent of the electric needs for 929 homes on Davis-Monthan AFB and will be the largest solar-powered residential community in the US. Collectively the project will offset more than 570 million pounds of carbon dioxide over its lifetime, which equates to taking 50,000 cars off the road for a year or planting more than 300,000 trees.

AMC West, a housing project owned by Balfour Beatty Communities (BBC), has also embraced energy conservation. They are installing solar light tubes in laundry rooms and pantries at Travis and Tinker AFBs to utilize natural light and reduce electrical expenses as well as ensuring all renovations and new construction have energy efficient appliances and light fixtures.

Water conservation is another area of focus for project owners.

ALL is currently working on implementing moisture sensing devices to monitor and reduce irrigational water consumption by up to 70 percent at Peterson, Schriever, and Los Angeles AFBs. Other water conservation measures include installation of low-flow bathroom and kitchen fixtures, low-flow irrigation heads, and novel

programmable landscape designs, such as xeriscaping, to help reduce water consumption by up to 50 percent.

Recycling has become a way of life for BBC housing at Vandenberg AFB. Batteries and light bulbs are recycled through the self-help store. The LifeWorks Program, a health and wellness program sponsored by BBC, helped residents build a "recycled robot" to teach area children about recycling. Other community activities at Vandenberg AFB, such as Habitat for Humanity, are joining recycling efforts and working with project owners to salvage housing materials, foundations, and asphalt. The local boy scouts are giving newly established neighborhoods a more mature look by moving and replanting trees that are scheduled to be demolished.

Colonel Rodney Croslen, AFCEE/HP Division Chief, believes that emphasizing environmental sustainability at every opportunity is crucial to preserving the world's resources and current quality of life.

"Today we see the growing emphasis on sustainability, which is more than just about environmental or energy programs. It is about the responsibility of everyone and the choices we make in how we live, work, and plan for the future" said Col Croslen. "The Air Force Housing Privatization Program Management Office and our partners in privatization are committed to continuing our efforts to integrate sustainability into everything we do. Through innovative planning and implementation we will help secure that guarantee of freedom of choice and quality of life for our dedicated military families while also better managing our precious resources for the benefit of future generations."

The author is an AFCEE/HPO contractor. □

Air Force Installations and AFCEE Working Together to Accomplish Military Munitions Response Program Requirements

The Department of Defense (DoD) develops, tests, and trains with munitions to maintain our military's readiness and support the mission to deter adversaries and defend our nation.

After years of munitions-related activities, unexploded ordnance (UXO), discarded military munitions (DMM) and munitions constituents (MC) are present to some degree at most DoD training facilities and former ranges. To address these military munitions and associated chemical residue at non-operational ranges, Congress established the Military Munitions Response Program (MMRP) in 2001. This program includes developing a comprehensive inventory of sites containing UXO, DMM, or MC and assigning a relative priority to manage response activities more effectively at those sites.

AFCEE is helping installations move forward with protecting human health and the environment under the Air Force MMRP. For the initial work, the Air Force implemented Phase I and Phase II Comprehensive Site Evaluations (CSEs) which are similar to Preliminary Assessments/Site Investigations (PA/SIs) conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The goal of the CSE is to obtain sufficient data to support the Air Force in making decisions to effectively manage munitions response areas (MRAs) and munitions response sites (MRSs) with regard to the current and projected future land uses. An MRA is an area on a defense site that is known or suspected to contain UXO, DMM, or MC. An MRS is a subdivision of an MRA that



Investigation of munitions at Barksdale AFB



Unknown munitions debris in the wooded area of former bombing Range at Lackland AFB, Texas.

allows a specific action to take place for that MRS which may not be appropriate for the entire MRA.

Several installations, including Lackland Air Force Base (AFB), Texas; Kirtland AFB, New Mexico; Randolph AFB, Texas; and Barksdale AFB, Louisiana are completing Phase II CSEs and making decisions for the next steps at the MRSs depending on results of the CSEs. The next steps may include conducting interim removal actions and/or a No Further Action decision document, or proceeding to the Remedial Investigations/Feasibility Studies (RI/FS) phases in the CERCLA process. These actions will achieve response complete (RC) or remedy-in-place (RIP) at all MRSs by 2020 to meet DoD goals. AFCEE is supporting these installations in meeting these goals through several contracting vehicles including:

- Design-Build, Restore, Remediate (DBR2) contract with eight contractors qualified to support environmental, remediation, and construction activities.
- Worldwide Environmental Restoration and Construction 09 (WERC09) contract with 44 qualified contractors that can complete environmental restoration and construction, traditional construction, and performance-based remediation efforts.
- 4PAE08, an Architect and Engineer contract under which the Remedial Investigation and Feasibility Studies may be conducted.

Performance-Based Contracting (PBC) and Performance-Based Remediation (PBR) requirements are also addressed under these contracts. Task orders

under the first two contracts may involve a PBR or PBC approach, where desired outcomes of the work are identified without specifying the methods or technologies to be used. Under such efforts, the contracted work is performed with a focus on results. A PBR or PBC task order enables the contractor to select actions best suited to the site requirements, and ensures that best management practices and best available technologies are employed.

At Lackland AFB, there are 20 MRSs that will be addressed under a PBC DBR2 contract scheduled to be awarded in fiscal year (FY) 2010. The 20 MRSs can be divided into three categories with different performance objectives based on the information obtained during the Phase II CSE. Two of the sites are former bombing ranges. The performance objective for work at these MRSs is a completed RI/FS, obtaining a Record of Decision that is acceptable to the regulatory agencies, and removal actions.

The remaining MRSs include former small arms ranges, some requiring removal action and confirmation sampling for remediation of lead and Polycyclic Aromatic Hydrocarbons (PAHs) and a site for historic munitions storage. Performance objectives include documentation to support no further action and site closure or decision documents for sites that overlap with the former bombing ranges.

The MRSs undergoing further work at Kirtland AFB are two former skeet ranges. The work will be conducted under a DBR2 contract planned to be awarded in FY10. The contractor will conduct removal actions of lead shot and target debris, and treatment of soil to facilitate remediation of lead and Polycyclic Aromatic Hydrocarbons (PAHs). The approach is to develop an Engineering Evaluation/ Cost Analysis (EE/CA) as part of a non-time critical removal action under CERCLA. The contractor will also conduct a removal action and develop a remedial action completion report and a no further action proposed plan as part of achieving site closure.

Randolph AFB, Texas is responding to an MRS that requires removal action for lead and PAHs at a former skeet range. This project will be managed under the WERC09 contract. This MRS poses a unique set of concerns as it is partially located on the tenth fairway of the Randolph AFB golf course. The contractor will need to ensure minimal interruption of recreational use of



Barksdale EOD removed a practice munition for destruction at Barksdale AFB

the site and mitigate damage to the golf course and its infrastructure of the irrigation system, golf cart paths, and vegetation. Restoration will be completed to the original standards of the golf course.

Upcoming MMRP work at Barksdale AFB includes 22 MRSs requiring further efforts. These MRSs were surveyed and munitions investigated. Munitions found at these sites include smoke grenades and practice munitions. As sampling crews encountered suspected munitions and explosives of concern, the 2nd Bomb Wing Explosive Ordnance Disposal (EOD) unit staff at Barksdale AFB responded to ensure their safety.

AFCEE is invested in achieving success on these projects and will execute task orders against the contracts and monitor the contractors on the awards at Lackland, Kirtland, and Randolph AFBs to refine the approaches for future awards, including the future work at Barksdale AFB. The AFCEE Project Managers who direct this work are supported by the Technical Division (TD), which serves as the Air Force's center for technical reach-back, and Environmental Restoration (ER), which supports installations with remediation and site closeout requirements. Achieving success under these contracts will ensure the Air Force meets the DoD goals of RC or RIP by 2020 for MMRP.

Information for this article has been contributed by: Environmental Programs Section (Central) - Brenda Roesch (Brenda.Roesch@us.af.mil), Project Managers - Julio Roldan, Kevin Leachman, Michael Litman, Joe Urritia; Environmental Restoration Division - Jon Ussery (jon.ussery.1@us.af.mil); Technical Support Division - Jon Halisack (jonathan.halisack@us.af.mil); Wallace Robertson (Barksdale AFB); Scott Clark and Wayne Bitner (Kirtland AFB); Jason Rose (Lackland AFB); Katy Breyer (Randolph AFB); Booz Allen Hamilton; and AGEISS Inc. □



Expended M18 smoke grenade found at Barksdale AFB

Air Force officials award cleanup contract for former Mather Air Force Base



This groundwater treatment facility removes chlorinated chemicals from the water extracted from beneath the former Mather Air Force Base in Rancho Cordova, Calif.

SACRAMENTO, Calif. (AFNS) -- Air Force Real Property Agency officials announced July 1 the award of a multi-year performance-based contract to URS Group, Inc. to perform environmental restoration activities at the former Mather Air Force Base in Rancho Cordova, Calif.

The \$8.57 million contract runs through 2015 and saves the Air Force approximately \$16.01 million, officials said.

Mather closed in 1993, but Air Force cleanup has been ongoing at the base since the 1980s. While all major cleanup decisions have been made regarding the installation's restoration program sites, some remaining activities require long-term operation and maintenance.

Performance-based contracts are relatively new within the Air Force environmental cleanup program. In 2006, AFRPA officials revised their approach from a task-specific cleanup approach to a long-term objective-based approach. This encourages the implementation of new or innovative approaches and technologies.

The savings are realized by allowing private companies to compete on a large comprehensive cleanup project over a five and a half year timeframe, rather than bidding on specific cleanup tasks on an annual basis. The contract objectives focus on work results, such as site closure, rather than specified methods or technologies to be employed. The multi-year contract also results in additional cost savings through streamlined contracting actions and lower overhead for the Air Force.

"This is another great example of how we are leveraging the best of what private industry has to offer to complete cleanup as quickly and cost-effectively as

possible," said Mr. Sig Csicsery of the Air Force Real Property Agency.

Although URS now has the contract to clean up the sites at Mather, the Air Force remains responsible for the execution of the cleanup program and all cleanup decisions, as specified in the Comprehensive Environmental Response, Compensation, and Liability Act. All technologies and remedies that URS applies to this cleanup must be approved by appropriate Air Force officials, as well as federal and state regulatory agencies, and coordinated with the community.

This competitive performance-based contract was awarded by logisticians at the Air Force Center for Engineering and the Environment, who jointly manage and implement the former base cleanup programs with AFRPA.

URS was selected for this work because their experience, proposed technical approach, and cost offered the best value to the Air Force. Their approach includes site closures and optimization techniques that are compatible with the existing cleanup objectives at this site. □

Arnolds AFB

URNS UP THE HEAT

By Jennifer Schneider

The Arnold AFB Restoration Team achieved its last remedy in place when they switched on power to the new thermal treatment system at SWMU 10, a former leach pit, on June 3, 2010.

A ribbon-cutting ceremony was held to celebrate the successful design, construction and start-up of the system.

"The operation of this system marks the achievement of a significant milestone in the AEDC (Arnold Engineering Development Center) Restoration Program tackling our most challenging chlorinated solvent site," Lt Colonel Saroya Follender, commander of the 704th Mission Support Group at Arnold AFB, said.

"This project has been an outstanding success due to the commitment and hard work of individuals across a diverse group of organizations."

Spearheaded by the Civil Engineer Branch, the project was an extensive collaboration between AEDC, the US Army Corp of Engineers-Tulsa, Aerospace Testing Alliance (ATA), CH2M Hill Constructors, Inc. and TerraTherm.

AFCEE project manager Anthony Williams is pleased with the ongoing achievements at Arnold AFB and credits teamwork and preplanning for the program's success.

"Arnold's restoration program is well managed, forward thinking, and an example for others to emulate," Mr. Williams said. "The Arnold folks have excellent working relationships with each other, the state regulatory agency, and the local populace through the Restoration Advisory Board (RAB). They work hard to build good multi-year programs, they promptly award contracts/obligate funds, and professionally execute their projects."

From 1950 to 1972, an estimated 31,000 gallons of chlorinated solvents, including perchloroethylene (PCE), were reportedly disposed into the former leach pit, equating to 300,000 pounds of contaminants to be removed. Remedying the contamination involves



Photo courtesy of Rick Goodfriend

Officials cut the ribbon in a June ceremony highlighting the design, construction and start-up of a large-scale soil and groundwater thermal remediation system behind the Model Shop.

removing the solvent source material from the subsurface to the top of the limestone bedrock, which is approximately 95 feet below the surface. Other treatment systems were considered, including 'pump and treat', but the timeframe required for other methods to work made thermal remediation a more viable option.

"Shallow pump and treat systems would take a very long time," Mr. Denny Timmons, AEDC's Restoration Program Manager, said. "There was a risk of the contaminants mobilizing and migrating off base."

The thermal treatment system works by injecting steam deep into the soil to extract chlorinated solvents and following up with radiant heat in shallow soils. The extracted groundwater then undergoes treatment by air stripping and activated carbon, while the PCE-laden vapor is destroyed in a thermal oxidizer and the exhaust gases are treated by an acid gas scrubber.

The system is expected to be 99 percent effective, according to Mr. Mike Singer, project manager at CH2M Hill Constructors, Inc.

The \$10.8 million project was awarded in September 2008. Through some additional site characterization and a series of design review workshops led by Mr. Singer, the project team arrived at a final design in seven months. Construction began in September 2009.

Implementing a system with this level of complexity is not without challenges, particularly during an icy Tennessee winter.

"We had a harsh winter, with a significant amount of ice to deal with," Mr. Singer said. "Also there are a lot of safety considerations to take into account when you are dealing with high voltage electricity and steam."

The project covers an area of 27,360 square feet and a volume of 66,700 cubic yards. During the nine months of construction, over 30 wells and boreholes or 17,000 linear feet were drilled. Over 5,000 linear feet of process piping and 25,000 feet of cable were installed. The project is one of the largest remediation projects in the country, Mr. Timmons said.

So far, the system appears to be functioning as designed, with only minimal alterations required. A couple of minor modifications to the system included raising some wells higher to address soil grading after

a rain, and moving electric control panels to address condensation issues from the heat treatment building.

"These were just small problems -- there haven't been any real issues (with the system)", Mr. Timmons said.

The system is expected to operate through December when sampling will help determine the progress made and how best to deal with any residual contamination.

"We have a project in for the coming fiscal year to look at bioremediation or soil washing," Mr. Timmons said.

"Once the (thermal remediation) project is complete and the soil temperature is back to normal, we will decide what we need to do."

Arnold's environmental restoration program remains very active with investigations of known military munitions sites, cleanup of several compliance restoration sites, and implementation of recent Environmental Restoration Program Optimization recommendations. Achieving its last environmental restoration remedy in place at Arnold AFB is a significant accomplishment and is a result of extensive cooperation and teamwork of many diverse groups and implementation of successful projects such as this one. □



Image courtesy of CH2M Hill, Inc.

Watch List targets sites which have detoured on "road to RIP"

By Lisa Schmidt

The Air Force Installation Restoration Program (IRP) is designed to identify, investigate, and cleanup the contamination associated with past Air Force activities at active Air Force installations, government-owned and contractor-operated facilities, off-site locations where contamination may have migrated, third party sites and sites that the Air Force formerly owned or used. Under the IRP, the Air Force is committed to meeting its lawful obligations to eliminate threats to public health and restore natural resources for future use. Although the AF IRP addresses many types of sites where contaminants have been released to the environment prior to 1984, the three most common types involve releases of petroleum products, industrial chemicals and landfills. Of the 6,650 legacy IRP sites, 92 percent have achieved Remedy-in-Place/Response Complete (RIP/RC) status. Additionally, 98 percent of the sites are projected to meet the Air Force goal to achieve RIP prior by the end of fiscal year 2012 (FY12).

Part of the Air Force Restoration Program Management Office (R-PMO) approach to facilitating IRP execution is Road-to-RIP tracking, analysis and reporting of RIP metrics. Based upon the understanding gained from the data analysis, the R-PMO provides support toward meeting the RIP goals and ultimately RC/Site Closure (SC). Continued focus on cleanup activity progress has made it apparent that sites which have slipped beyond their originally forecasted milestones may require timeline extensions. Some of those sites, due to various



Photo by Don Buelter, AFCEE/ERC Program Manager

Barge conducting soil removal at Barter Island in Alaska where challenges such as remote locations and harsh weather conditions impact environmental cleanup Remedy-in-Place attainment.

circumstances, are expected to miss the FY12 goal, or are at least at high risk of doing so. Specific circumstances include past underfunding, unrealistically compressed schedules, regulatory delays and other issues and complex site requirements. Accelerated execution and funding for sites, where feasible, to meet Air Force and Office of the Secretary of Defense RIP Goals, and also working with regulators to harmonize Air Force and regulator site goals are among the types of initiatives the R-PMO has worked to benefit sites facing challenges.

To provide further technical and program support for the sites at risk, a "Watch List" of these sites was developed for focused tracking and reporting. Targeted oversight requirements for Watch List sites include wing commander coordination, continued installation Program Management Reviews and heightened regulatory engagement by the R-PMO and AFCEE Regional Offices, among other assistance-oriented activities. The R-PMO conducts coordination across an array of resources in support of the sites which have not yet achieved RIP, including MAJCOMs. Various support actions including meetings with California regulators, accelerated and advance-funded Environmental Restoration Account funding for remote Alaskan sites, and innovative contract approaches have been, and will continue to be, conducted to facilitate successful RIP/RC/SC accomplishment.

The author is a program manager in the AFCEE Environmental Restoration division. □

Chemical “fingerprints”

assist in identifying contamination sources

By Tammala Tennison

When it comes to environmental contamination, it is not uncommon for stakeholders to have very different opinions about everything from responsibility to clean-up. Reconstructing contamination events is often difficult, if not impossible. The introduction of environmental forensic chemistry is changing that.

In traditional environmental projects, standard chemical analysis is limited to determining how much of a regulated contaminant or compound is present. In forensic environmental chemistry, analytical chemists are able to “fingerprint” a compound by conducting additional analysis to find diagnostic or unique attributes. For example, ratios of naturally occurring compounds such as pristane and phytane have been successfully used to differentiate between two similar sources of diesel fuel.

According to Mr. Cornell Long, the Air Force Chemistry Program Subject Matter Expert, forensic chemistry techniques are increasingly being used in environmental remediation to decipher the source, fate, transport, and identification of environmental contaminants, determine their age, and allocate them to sources.

Environmental forensics data is also being used in negotiations for allocation of liability; in some cases the data may also be presented as evidence during litigation. With this in mind, it is important to plan to collect data to support multiple lines of evidence.

In April 2010, the AFCEE Technical Division Restoration Branch (TDV) finished the initial draft of the “Forensic Environmental Project Manager’s Guide”.

“The guide is intended to assist Air Force project managers in implementing forensic environmental chemistry investigations and evaluations at sites that are challenging or difficult to otherwise investigate,” Mr. Long said. “It’s being written for project managers who

need to make informed decisions on the design of cost-effective remediation techniques at complex sites.”

While the guide is not a “how-to” manual for the application of forensic chemistry, it will provide general information on selected forensic environmental chemistry methods and laboratory analytical tools, as well as their applicability and merits in environmental assessment and remediation, and will provide users with information, recommendations, and suggestions to develop the most adequate approaches for their site.

Forensic chemistry
techniques are
increasingly being
used in environmental
remediation

In addition to developing the guide, AFCEE’s chemists are also assessing how emerging trends such as green chemistry, new sampling strategies for the characterization of hazardous wastes, and the development of nanoscale chemicals can be employed.

For more information on environmental forensics and environmental chemistry initiatives, please visit <http://www.afcee.af.mil/resources/chemistry/index.asp>.

The author is an environmental protection specialist in the AFCEE Technical Support division. □

Save the Date -

2011 AF RESTORATION AND TECHNOLOGY TRANSFER WORKSHOP

By Theresa Haan and Erica Becvar

The 2011 Air Force Restoration and Technology Transfer Workshop (AF RTTW) will be held March 7-11, 2011, at the Omni Colonnade Hotel in San Antonio, Tx. The theme is “Collaboration for Closure” and will be hosted by the Air Force Restoration Program Management Office at the AFCEE Environmental Restoration Division (ER) in partnership with the Technology Transfer Program of the AFCEE Technical Division (AFCEE/TDV).

The program focuses on the latest in environmental restoration approaches and solutions with an emphasis on AF restoration policy and program management, and is designed to engage remedial program managers and their environmental partners in collaborative discussions on common issues and challenges facing the AF Environmental Restoration Program (ERP).

Short courses begin March 7, and topics will concentrate on the latest AF environmental issues, with world-class presenters providing the latest in restoration policy, guidance, and technology, as well as facilitating cross-feed and networking opportunities between AF restoration program managers, environmental consultants, policy makers, regulators, and stakeholders. Short courses continue through March 9, and range in length from half day courses to two day courses.

A plenary session will be held March 9, and will include presentations by AF leadership and recognized restoration experts covering the latest status, progress and future of the AF ERP. The workshop continues through March 11, with six concurrent session tracks focusing on AF policy and program management. Additionally, there will be several networking opportunities including evening events, an exhibit hall, and a luncheon featuring a guest speaker.

Registration for the workshop and short courses will be phased, with priority registration for all AF environmental restoration personnel with .mil email addresses open September 15 through November 17, 2010. Open registration, to include industry, other federal and state employees, and restoration stakeholders, begins November 18, 2010.



Plenary audience during the 2010 AF Restoration Technology Transfer Workshop.

Workshop registration for government employees is free. For industry, early registration is \$300, with the fee increasing to \$400 after February 1, 2011. On-site registration will be \$450 and begins March 7, 2011. Industry registrants are limited to current AFCEE contractors and their AFCEE teaming partners. There will be a limit of three people per firm, industry speakers excluded. (A list of contractors is available at www.afcee.brooks.af.mil/pkv/contracts.asp.)

Short course registration fees are separate and include the plenary session and networking reception on March 9. General workshop registration includes the plenary session, the networking reception, luncheon, and the sessions offered on March 10-11. Early registration is encouraged as the workshop is limited to approximately 400 attendees.

There is no solicitation for abstracts at this time, as all short courses and topics are being selected for the workshop by AFCEE/ER and AFCEE/TDV. However, topics can still be suggested.

For additional information, please visit www.afcee.af.mil/resources/technologytransfer/technologytransferworkshop or contact the workshop coordinator, Ms. Theresa Haan (AFCEE/ER), at theresa.haan@us.af.mil.

Theresa Haan is a physical scientist in the AFCEE Environmental Restoration Operations branch. Erica Becvar is a soil scientist in the AFCEE Technical Support Restoration branch. □

Upcoming tools and resources promote standardization of the Environmental Management System

By Tammala Tennison

In May 2010, the Secretary of the Air Force and Air Force Chief of Staff reaffirmed their 2001 commitment for meeting all Environmental, Safety, and Occupational Health (ESOH) requirements in a joint “Letter to Airmen”. The new policy statement charges all Airmen to take personal responsibility for protecting their health, reducing risks, and preventing negative impacts to the environment. The memorandum lists the top priorities of the Air Force ESOH policy as compliance with current laws and regulations, risk reduction, and continual improvement.

A major component of the overall ESOH program, the Environmental Management System (EMS), was initiated in the late 1990s, with initial implementation required by December 2005. Since then, all Air Force installations have implemented an EMS, with 91 installations having had their EMS reviewed by a third-party auditor.

EMS is built on a continuous improvement quality cycle consisting of “plan, do, check, act.” During the “plan” phase, the installation determines how its activities, products and services might interact with the environment and develops plans to eliminate those with negative impacts. As part of the “do” phase, the installation executes these mitigation plans. The installation assesses the EMS during the “check” phase and determines whether the objectives are being met. If modifications are necessary, the installation will “act” to make the system more effective.

Fully implemented, an EMS effectively incorporates environmental considerations into day-to-day operations, facilitates achieving and maintaining environmental compliance, promotes the continual improvement of both the environment and human health, and supports mission accomplishment and sustainability by focusing resources and managing issues with future environmental impacts.

As the Air Force further develops its EMS strategies, a number of tools and resources are being made available to facilitate a “one Air Force, one EMS” approach. Standardizing EMS business processes is expected to achieve greater organizational efficiencies and enterprise-wide cost reductions, while also providing the flexibility

necessary to ensure the EMS remains functionally useful and sustainable.

One of the most valuable resources expected to be available later this year is a new Air Force Instruction, AFI 32-7001, for Environmental Management. This AFI provides the first Air Force instruction outlining EMS requirements. Another important resource under final development is the EMS Playbook. In addition to centrally locating EMS processes and standard operating procedures, the EMS Playbook will define Headquarters Air Force, Major Command, and installation-specific EMS roles and responsibilities. It will also provide links to relevant information sources, and provide example documents and “how-to” instructions. When finalized, the EMS Playbook will be posted on the Air Force Civil Engineering (A7C) website at <https://cs.eis.af.mil/a7cportal/CEPlaybooks/Pages/default.aspx>

An additional critical tool for supporting an enterprise-standardized EMS, known as eDASH, is currently under development. The tool will include a searchable information repository of EMS guidance, policy, documents, factsheets, version-controlled documents, links to collaboration sites and discussion boards, frequently asked questions and answers, and the ability for users to post questions. eDASH will be available through the A7C SharePoint site.

The new EMS guidance and tools will play an important role in supporting ESOH policies as a whole. The safety and occupational health management systems have many natural overlaps with the EMS, in such areas as joint inspections, management of spill and emergency responses and management of hazardous materials. The ultimate goal is for these complementary systems to take advantage of all opportunities to avert duplication of effort and create synergy, and standardization and easy availability of EMS policies is in direct support of this effort.

AFCEE’s EMS vision can be viewed at <http://www.afcee.af.mil/shared/media/document/AFD-090908-020.pdf>. For additional information on the Air Force EMS and AFCEE EMS initiatives, contact Karen.winnie@us.af.mil.

The author is an environmental protection specialist in the AFCEE Technical Support division. □

Broad Agency Announcements fund development of innovative solutions

By Dr. Adria Bodour

While innovative environmental technologies abound, there are often limited opportunities to apply these potential solutions in the field. To further develop and validate these technologies and methodologies, the government developed a contracting mechanism, known as the Broad Agency Announcement (BAA), to fund meaningful technical and scientific proposals.

The FY11 Phase I BAA is open for solicitation

The AFCEE BAA program is managed by the Technical Support Restoration branch (TDV) in concert with the Environmental Restoration division (ER), the Capital Investment Execution Environmental branch (EXE), and the Specialized Environmental Contracting branch (ACR).

The BAA program's goal is to identify solutions that are technically advanced, efficient, effective, environmentally friendly and cost-effective.

Historically, the BAA focus has been largely on environmental restoration, as the Environmental Restoration Account (ERA) program has funded 29 out of 30 projects, totaling \$10M, over the last three years. Past ERA projects have ranged from \$97K to \$990K, with an average project award of \$328K and average performance period of 20 months, with the majority of the ERA funding (48 percent) focusing on innovative technologies and methodologies. In fiscal year 2010 (FY10), a non-ERA

BAA contract was funded by American Recovery and Reinvestment Act (ARRA) funds for \$5.8M.

Successful implementation and completion of the ERA-funded BAA projects can result in a mutually beneficial arrangement, with the organization or contractor receiving additional field testing of their proposed solution and the Air Force receiving assistance in achieving environmental restoration goals such as securing remedy in place (RIP); optimizing current remediation, monitoring or other systems which are already in place; and achieving site closure.

The BAA process is initiated when the TDV branch, in collaboration with numerous stakeholders, develops a list of current needs and priorities for remedial technologies. While it is highly encouraged for applicants to address these needs and priorities in their proposals, they are not limited to the list. This list becomes part of the BAA solicitation, which is open year-round and involves a two-phase submittal process. During Phase I, applicants must submit a short proposal via AFCEE's online BAA form. Upon technical review, applicants are informed whether or not to proceed with a Phase II application. Dependent on available funding, technically sound proposals are selected for an award. Typically, eight to ten projects are funded per year. More information on current and past funded BAAs is available at www.afcee.af.mil/resources/technologytransfer/baa/index.asp.

The FY11 Phase I BAA is currently open for solicitation. Installations that are interested in funding BAAs can contact TDV at afcee.td.baa@us.af.mil. Opportunities are announced under the solicitation number AFCEEBAA-08-001 on the website: www.fedbizopps.gov.

Additional information about the BAA process, including instructions for each phase, the evaluation factors, and due dates can be found on the AFCEE website (www.afcee.brooks.af.mil/pkv/baa).

Dr. Adria Bodour is the BAA program manager in the Technical Support Restoration branch. □

Site sustainability planning simplified with development of award-winning ToolKit

By Jennifer Schneider

The Air Force Sustainable Sites ToolKit was honored with an award for Environmental Planning Excellence at the April 2010 Federal Planning Workshop in New Orleans, La.

Paul Scoggins, a landscape architect/planner at Mildenhall AFB, United States Air Force Europe (USAFE), was the Air Force project manager. A team of individuals from AFCEE, including landscape architect Mr. Ted Shierk, community planner Mr. Stan Gross, general engineer Ms. Paula Shaw, Technical Support division chief Mr. Eldon Hix, and several subject matter experts and specialists provided support and oversight for the project.

The award is an acknowledgement of their vision and drive to develop a website to educate Air Force personnel about sustainability. The site was developed to provide a one-stop sustainability planning resource for landscape architects, community planners, contracting officers, project programmers, Leadership in Energy and Environmental Design (LEED) accredited professionals, project managers or anyone with an interest in sustainable site design.

The highly graphic and interactive content is targeted for any and all levels of expertise. This ensures a common

platform for personnel to clearly communicate goals and meet objectives through sustainable strategies presented.

The ToolKit incorporates a terminology dictionary, policy library, LEED guidance reference, interactive evaluation tools and return on investment calculators. The evaluation tool allows the user to assess a site plan or the installation as a whole against LEED and Low Impact Development (LID) recommendations. The goal of the ToolKit is to reduce environmental impacts and operational expenses on Air Force bases, and provide support for the requirements of the Energy Independence and Security Act of 2007, the Energy Policy Act of 2005 and Executive Order 13243.

Jury comments for this award winning educational website are as follows: "The Sustainable Sites ToolKit was designed to communicate the principles and benefits of sustainable design to professionals working on Air Force installations throughout the world. The ToolKit's extensive list and explanations of sustainable practices is a web tool which is easily accessed by designers and planners seeking to apply best practices to Air Force installations. The ToolKit should be able to convey the Air Force's commitment to sustainability and help newly constructed facilities meet LEED requirements and applicable federal building and planning laws."

The format of the ToolKit was designed to be flexible and allow for future updates and the eventual inclusion of additional sustainability strategies beyond site design.

"Our vision was to offer basic information about sustainability and specific information about site design strategies" Mr. Scoggins said. "We hope that other organizations will expand the content and develop interactive tools to address the goals and opportunities of architecture, SRM, RCI and others."

The ToolKit is currently available at <http://www.rexroadapg-examples.com/Sustainability2/index.shtml>. □



Civilian Deputy Director comes full circle

By Jennifer Schneider



Edward G. Noack

AFCEE civilian deputy director Edward G. Noack retired from the Air Force Center for Engineering and the Environment (AFCEE) in August, concluding a federal service career that spanned over 31 years, including almost ten years at AFCEE.

Upon AFCEE's move to Building 171 at Port San Antonio, Mr. Noack's career came full circle, his first civil service position workplace being located only a few feet from civilian deputy director's office in Bldg. 171. His first position for the Air Force Material Command (AFMC) at Kelly AFB was responsible for forecasting and budgeting for repair and distribution of parts for aircraft, engines and equipment.

Upon his arrival at AFCEE, Mr. Noack served as the Mission Support Director, later to be reclassified as the Operations Support Division Chief. As part of his position, he was primarily responsible for ensuring that resources and support were available for the AFCEE divisions and Regional Environmental Offices to accomplish their missions. This support system included the financial management branch, computer systems support and human resources personnel.

In March 2010, as a result of the internal restructuring of AFCEE, he was promoted to the newly established position of Civilian Deputy Director, a move to provide additional leadership support for the growing agency.

During his time at AFCEE, there are many accomplishments he takes pride in as the organization has grown over the last decade into a \$2.5B enterprise.

"One of the things I'm most proud of is being part of the effort to stand up the AFCEE capability to support construction in Iraq and Afghanistan," Mr. Noack stated. "I think that was important for the nation and certainly for AFCEE."

Other accomplishments include supporting AFCEE's transformation into the Air Force provider for military construction and environmental restoration, he said.

Mr. Noack has many fond and humorous memories from his time at AFCEE, including an episode with migrating barn swallows.

"I remember putting a canopy under the front door at Building 532 (at Brooks AFB) because we had barn swallows nesting in there," he laughed. "They were dropping calling cards on people walking in the door. We couldn't remove the nests because they were migrating birds and protected by international treaties. For about a year we put up a canopy to shield people, and later we put up some netting to discourage nest building over the front entry."

Joking aside, Mr. Noack said it is the people at AFCEE that will leave the most lasting memories.

"I have fond memories of the people I worked with," he said. "They are a very caring, giving people at AFCEE. I sure have enjoyed the time I've spent with them."

Contemplating AFCEE's future and challenges ahead, he is confident that the new civilian deputy director and AFCEE as a whole will be successful.

"I feel good about the people that are here at AFCEE," he said. "I know that they'll step up to the challenges ahead as they have to the ones in the past."

As for his own future, Noack plans to spend time with family and work on projects around the home.

"I have two grandsons that just arrived (this year). I'll spend some time with them. And I'm sure I have a year's worth of stuff to do around the house, doing some things my bride has lined up for me," he said. "Whenever she retires, we'll do some traveling. I also plan to work on my golf game." ■

Maj O'Rourke poised to lead the JA team

By Jennifer Schneider



Maj. Kathleen O'Rourke

Dark clouds can have silver linings. Maj Kathleen O'Rourke, the new Legal (JA) division chief, may have never chosen a career in Air Force law had it not been for a few detours along the way.

Growing up in Massachusetts, Maj O'Rourke worked summers at her parents' seafood restaurant on Cape Cod.

She spent her free time practicing her favorite sport, field hockey. The hard work paid off -- her high school team won the state championship her senior year with 23 wins and no losses. Her success, along with a strong academic background, helped her secure a field hockey scholarship at Dartmouth College, with a major in Russian Studies.

Upon achieving her Bachelor of Arts in Russian Studies in 1992, she found that the end of the Cold War and the breakdown of the Soviet Union called for a reevaluation of her career path.

"Just as I was graduating, the Cold War ended and the Soviet Union fell apart," Maj O'Rourke said. "We (Russian Studies majors) too became relics of the Cold War."

With a military family background, she considered and was accepted into Officer Training School in 1994. She served at Randolph AFB, TX from Nov 1994 to Aug 1996 as both Executive Officer and Squadron Section Commander. She became a Command Protocol Officer for Headquarters Air Force Material Command at Wright-Patterson AFB in Ohio from Aug 1996 to Aug 1998. While at Wright-Patterson AFB, she learned about the Funded Legal Education Program (FLEP), which provides Air Force funded law school training to a limited number of active duty officers each year. She made the decision to apply and was accepted to attend law school at the University of Texas, Austin.

She was awarded her Juris Doctor in 2001, and went on to pass the Massachusetts bar exam. She served as Assistant Staff Judge Advocate at the Langley AFB legal office in Virginia until 2004, where she worked as a prosecutor, claims officer and legal assistance attorney.

She served as the Langley Area Defense Counsel from Jul 2004 until Apr 2005. It was this position, she said, where she "got the litigation bug".

She then served as the Chief of Strategic Communications from Apr 2005 until Aug 2007 at the Headquarters Air Force, The Judge Advocate General (TJAG) Action Group, at the Pentagon, Washington, D.C. In this job, she wrote speeches, served as the newsletter editor, and built briefings for the Judge Advocate General.

At that point in her career, Maj O'Rourke decided it was time to choose a direction or legal specialty. She found criminal law to be "emotionally exhausting" and somewhat "drama-laden." A friend mentioned the possibility of looking into contract law, which didn't immediately appeal to Maj O'Rourke.

"I had hated contract law in school, but I found out that government contract law is very different from typical contracts commercial," she said. "Now, I love government contracts."

She was awarded her Master of Laws in Government Procurement in 2007 at George Washington University Law School in Washington DC.

From Jun 2008 to Jul 2010, she served as a trial attorney and the chief of bid protests on the Contract Litigation Team in Arlington, Va. While there, she was deployed to Joint Contracting Command, Bagram AFB in Afghanistan for six months. She joined the AFCEE team in August.

Maj O'Rourke is excited about her new position, noting that AFCEE combines everything she "likes to do". "We have a really good team here," Maj O'Rourke said. "Combined, there is over a century's worth of legal expertise that we bring to bear on legal issues. It's almost impossible to fail with such a good team behind you."

While most see legal advisors in a positive light, she knows some may not see their role positively.

"Some people view us as obstructionists, and think we keep them from getting things done," she said. "I view us as facilitators; we are just trying to keep everybody on the right side of the law and protect the integrity of the mission."

Maj O'Rourke may have had other aspirations early in her career, but is proof that unexpected detours can still lead to the most scenic route. □

Staff judge advocate retires



Lt Col Jennifer Smith

By Jennifer Schneider

Lt. Col. Jennifer Smith, AFCEE Legal division chief, completed her last day at AFCEE on July 26 and will be retiring on October 31 with 20 years of military service. She came to AFCEE in 2008 after serving as special counsel for acquisition in the Air Force General

Counsel's office in the Pentagon.

Lt. Col. Smith received her J.D. from William Mitchell College of Law in St. Paul, Minn., and an LL.M. in government procurement law from the George Washington University Law School in Washington, D.C. She started her Air Force career as assistant staff judge advocate at Norton Air Force Base, Calif. and held a variety of assignments during her career, including area defense counsel, federal court trial attorney and staff judge advocate. She also served as chief of combat

logistics and fiscal law at Headquarters Ninth Air Force and United States Central Command Air Forces at Shaw Air Force Base, S.C. from 2002 to 2005.

One of her top accomplishments during her time at AFCEE, she said, has been the development of a Root Cause Analysis Team, led by Capital Investment Execution chief Mr. Terry Edwards. The team works to assist projects experiencing difficulties get back on track and avoid litigation.

During her time at AFCEE, Lt. Col. Smith has enjoyed the diversity of the organization.

"It is a great team of people," she said. "I enjoyed the cross-functional teaming aspect of it with all of the different areas of expertise coming together to get a program done. Working for a great leader like Mr. (Dennis) Firman has been a special highlight."

Upon retirement, Lt. Col. Smith plans to continue to teach Business Law and Political Science through LeTourneau University's online educational program. LeTourneau University is based in Longview, Tx. □

Awards & Recognition

Congratulations to Mr. Paul Parker

Congratulations to former AFCEE director Mr. Paul A. Parker for his promotion to Director of Communications, Installations and Mission Support at the Headquarters Air Force Materiel Command (AFMC) at Wright-Patterson Air Force Base, Ohio.

AFCEE Superior Performers of the Quarter

AFCEE's superior performers for the first quarter 2010 were Ms. Kathy Schmelzer from AFCEE's Natural Infrastructure Branch, Mr. Steve Stark from AFCEE's Housing Privatization division and Mr. Harold Bohannon from AFCEE's Contingency Construction division. Captain Ferdinand Maldonado from the AFCEE Contingency Construction branch was awarded Company Grade Officer (CGO) Performer of the Quarter.

Superior performers for the second quarter were Ms. Micah Shuler from AFCEE's Capital Investment Execution Housing (EXH) branch and Mr. Frank Castaneda, III, from AFCEE's Natural Infrastructure

Branch. Captain Travis Guidt from the AFCEE Capital Investment Management Central branch was awarded Company Grade Officer (CGO) Performer of the Quarter for the second quarter.

The Superior Performers award recognizes AFCEE civilian and military employees who have performed all assigned and related duties in an outstanding manner during the award period. The divisions nominate one individual which are then scored by all divisions during a panel review procedure at a scheduled board review.

Winners receive a letter of appreciation signed by the Commander, a time-off award equivalent to one day, a recognition plaque and publicity.

Retirement Ceremony

Congratulations to Lt Col Benjamin T Kindt and Maj Donald S. Johnston for their years of military service to the US Air Force. Ceremonies were held Aug 5 and Aug 13, respectively. □

AFCEE architect and MILCON program manager earn prestigious Order of the Bayonet award

By Jennifer Schneider

The Air Mobility Command (AMC) Security Forces presented architect Mr. Wayne Reber, chief of AFCEE's TD Planning and Design Standards section, and Mr. Jeff White, retired AFCEE military construction (MILCON) program manager, with the Order of the Bayonet award on Jan. 19, 2010, at Scott Air Force Base, Ill.

The award, which is the highest honor security forces can bestow, was established in 1981 to acknowledge the accomplishments of individuals who have made significant contributions to the security and ground defense of air bases, regardless of their position or rank.

Prior to joining the AFCEE team in 2008, Mr. Reber served as chief at the AMC Design Center. Mr. White, who retired from AFCEE in Dec. 2009, served as landscape architect at the AMC Design Center before joining AFCEE. They received the awards along with two other civil engineering personnel, Col. Vince Saroni and Maj. Efreem Rivers, for their work on the AMC AT/FP Entry Control Facilities Program.

Everyone pulled together
toward a common goal –
doing it right

Mr. Reber emphasizes that the effort was very team-oriented.

"Being recognized along with these other dedicated professionals was especially rewarding," he said. "It was a true team effort. Everyone pulled together toward a common goal – doing it right."

The \$100M program encompassed several O&M and MILCON projects affecting 29 entry points at 12 bases. The goal of the post 9/11 program was to enhance perimeter security at the bases and develop standardized entry control facilities and processes.

The team faced a variety of challenges, including budget constraints and tight time schedules.



Colonel Vince Saroni, Maj. Efreem Rivers, Mr. Wayne Reber and Mr. Jeff White display Order of the Bayonet awards.

"Each base could have multiple projects," Mr. Reber said. "For example, the reconfiguration of the roadwork might have been one project. Each one had a separate funding limit. Trying to integrate them as a whole was a challenge. Also the schedule was pretty intense. We had to have this done quickly. We finished in slightly over two years."

Another challenge was the development of designs in compliance with the architectural compatibility plan for each base, to make the entry points both aesthetically pleasing and secure, and to conform to the unique architecture already in place.

"AMC wanted consistency in operations, a consistent flow of procedure as you enter. The lay of the land and configurations were quite different from base to base, but the processes were supposed to be the same," he said. "The challenge was not to stray from the concept design, but to stay consistent with what senior leadership had already approved."

For a civilian to earn the award is special, Mr. Reber stated.

"I was both thrilled and humbled with the award," he said. "I sincerely appreciated this honor from the SF community and AMC leadership. Having my efforts as an architect recognized with words like this are very meaningful since they come from AF Warriors." □

Change is predominant theme for 2010

By Jennifer Schneider

Change is a constant, and that is no exception for the Air Force Center for Engineering and the Environment (AFCEE). In addition to the physical move to Building 171 at Port San Antonio, the Center underwent a re-organization in March as part of an effort to fine-tune the 2007 structure that was developed when AFCEE's role was transformed into managing the Air Force's military and housing construction and environmental restoration programs.

Key adjustments included the creation of a new division (ER) to support the AF Environmental Restoration (ERA) program management office, a new branch in Housing Privatization (HP) to address HP compliance, stand-up of a separate Chief Financial Office (CFO) division to provide financial management services, the combination of operations support functions, process improvement and strategic and acquisition planning into a new Operations Support (OS) division and the establishment of a new civilian deputy director position.

The changes were implemented in response to a growing workload and additional responsibilities. Adjusting to the role AFCEE acquired in 2007 was a learning process.

"Once we understood the workload, it drove some re-organizations," AFCEE Director Dennis Firman said. "They were all driven by a span of control that we didn't really have a good feel for when we started the transformation. We had to work through it."

The ER division was previously combined with the capital investment management division (CM), but the size and scope of the workload for both the environmental restoration and military construction (MILCON) programs warranted the split into two separate divisions.

"It was too much of a workload for one division chief," Mr. Firman said. "They are two immense programs. The only thing they had in common was a program management responsibility – the work was a completely different work process."

"All the support functions – manpower, computers, long-term planning – bringing it all in one place just made sense."

New ER Division Chief Colonel Jeffry Knippel sees the split as a means to increase visibility for AFCEE's environmental restoration projects.

"When we were buried under CM, the environmental restoration programs didn't get the visibility needed," Col Knippel said.

The movement of the financial management branch from Operations Support into its own division, the CFO, was a way to provide the group with equal footing in comparison to the other divisions and allow the CFO

to focus on just financial issues, AFCEE Deputy Director Colonel Wilfred Cassidy said.

"It should enhance communication across the divisions," Col Cassidy said. "It gives them (CFO) a direct link to the director without an interim step."

CFO Division Chief Mr. John LaHue sees the change as very beneficial to the organization.

"It adds a more robust financial discussion to the staff meetings," Mr. LaHue said. "It is also easier for us (CFO) to get information firsthand. This helps me and I, in turn, am able to pass on the information to my group."

The restructure affected other support divisions as well. Prior to the re-organization, strategic initiatives functioned separately from operations support. The merging of the operations support and strategic initiatives divisions allowed the organization to have one robust division which could oversee all business processes.

"We put all support functions under one division," Col Cassidy said. "All the support functions -- manpower, computers, long-term planning -- bringing it all in one place just made sense."

Ms. Christine O'Brien was chosen to head the new OS division, and believes the new structure provides more opportunity for fine-tuning business processes and implementing the organization's strategic plan.

"We saw synergies that could be achieved if we aligned the business processes of the agency with the information technology and manpower functions," Ms. O'Brien said. "There was previously a disconnection. Strategic Initiatives (SI) was the champion for business process improvements, but we didn't have the operations support people in the same division to help implement the process improvements. We are reaping the rewards for this realignment as we support A7CR (Air Force Civil Engineer Resources Division) as they lead the charge for NexGen IT."

The establishment of the new civilian deputy director position, initially assigned to recently retired Mr. Edward Noack, former Operations Support Division Chief, was also a reflection on the scope and magnitude of AFCEE's current mission.

"We created the position because of the enormity of the work we have here," Mr. Firman said. "I felt like, with one deputy, we weren't getting enough hands-on oversight from the front office, so I brought in a second deputy and we split the baby in half. We gave half the programs to one deputy and half to the other deputy. Since that has happened, I've been able to raise my head and start looking strategically instead of getting involved in too much day-to-day activity."

Col Cassidy said the amount of travel involved for the director and deputy director was also a factor. "With the travel requirements, there are a lot of times that more than one of us (Col Cassidy and Mr. Firman) is on the road," Col Cassidy said. "This makes it more likely that we will have someone available in the office."

As AFCEE adjusts to their new surroundings and structure, additional changes are on the horizon. AFCEE's Acquisition and Contracting (AC) division will

be realigning under the Air Force Materiel Command's (AFMC) new Enterprise Sourcing Group (ESG), and will activate as the 772nd Enterprise Sourcing Squadron (772 ESS) in October 2010. The 772 ESS will continue to be physically co-located with AFCEE. Although the move will present challenges, Mr. Firman sees it as ultimately improving processes and increasing accountability.

"There's going to be a lot of accountability across organizations that we don't have now, because we're all one organization," Mr. Firman said. "We're going to have a Memorandum of Agreement (MOA) between the AFMC and the AF Civil Engineer on delivery metrics. It will be a better process and have the capability to measure performance."

AC Division Chief Colonel Geoffrey Ellazar said the realignment is consistent with the realignment of other contracting organizations across AFMC, which puts AFMC contracting organizations and personnel under contracting rating chains.

"It reinforces the functional independence and bias-free decision making of contracting officers that is the cornerstone of acquisition integrity," Col Ellazar said. Col Ellazar does not see the move as having an immediate noticeable effect.

"The effect for AFCEE customers should be transparent," he said. "There will be different reporting chains, but for the majority of customers, it will be business as usual. Further down the road, the positive impact of the ESG as a whole will be felt by all Air Force customers as we leverage economies of scale and combined buying power to create new efficiencies while generating savings. We will all benefit from the AF strategic sourcing grand strategy."

As AFCEE continues to change in response to new missions and challenges, these changes will improve the organization's dynamics and streamline processes ensuring future success. □

Building 171: Planning for a Sustainable Future

By Jennifer Schneider

Port San Antonio's Building 171 has served many purposes and seen many events unfold. Originally built in 1942 to provide World War II weapons storage, it has also served as a shipping depot and logistics center and later as a shelter for Hurricane Katrina victims.

Now the 452,000 square foot building has been fitted with a new function: to become one of the largest single-level administrative buildings in the Department of Defense, ultimately housing approximately 3,000 employees from 12 Air Force agencies to include the Air Force Center for Engineering and the Environment (AFCEE), the Air Force Real Property Agency (AFRPA), the Air Force Medical Operations Agency (AFMOA), the Air Force Services Agency (AFSVA), the Air Force Public Affairs Agency (AFPAA), Headquarters Personal Property Activity (HQPPA), the Joint Personal Property Shipping Office (JPSSO), the 24th Air Force (24AF), the Air Force Medical Support Agency (AFMSA), the Air Force Judge Advocate General Environmental Law / Litigation (JACE), the Air Force Outreach Program Office (AFOPO), and the Air Force General Council (GCN).

The consolidation and move to the building has been the result of years of planning and the execution of Leadership in Energy and Environmental Design (LEED) certifiable renovations to both the interior and exterior to comply with current Anti Terrorism/Force Protection guidance, and to modernize the HVAC and communications infrastructure.

Exterior improvements are being funded by Base Realignment and Closure (BRAC) 2005 as part of a \$4 million contract with Port San Antonio, and are expected to reach completion in October 2010. DL Bandy Constructors Inc was awarded the contract which includes parking lot repair and construction of additional parking lots, ultimately providing a projected total of 2,600 spaces. The contract also encompasses construction of a perimeter security fence, two guard houses, an exit-only gate, and paving support for two new entrances and a separate truck entrance.

Throughout the renovation process, increasing the sustainability of the interior and exterior of the site



Conceptual representation of proposed seating areas to complement dining facilities in Building 171.

and improving quality of life for occupants have been key objectives.

The initial design of the parking lot addition was reconfigured by the AFCEE Built Infrastructure Branch, Planning and Design Standards Section (TDBS) to conserve as many trees as possible, said Mr. Theodore Shierk, AFCEE TDBS landscape architect.

"They improved the parking layout, and allowed us some gathering spaces for those organizational activities that go on at every Air Force installation," AFCEE TDBS Chief Mr. Wayne Reber said.

Interior sustainability has also been a focal point. The building is composed of eight bays, each consisting of 40,000 to 50,000 square feet. Interior improvements are being funded as part of a \$26.9 million Air Force Military Construction (MILCON) project and are expected to reach completion in fall 2010. ECC, the prime contractor, is handling the renovations for seven of the bays and is providing new carpet and paint, ceiling insulation, installation of Anti-Terrorism/Force Protection (ATFP) windows and frames, security enhancements at the eight entrances and HVAC repair. Remodeling for bay five, the anticipated home of the 24AF, is a separate task order

and still in the design stage with the contract expected to be awarded in Sept 2010.

ECC Design Manager Deborah Locklair said ECC has been working with the contractors and occupants on achieving the LEED for Commercial Interiors certification for the building from the US Green Building Council (USGBC).

LEED certification recognizes performance in eight key areas: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, locations and linkages, awareness and education, and innovation in design.

These categories were addressed in the remodeling efforts, as efforts were made to utilize materials composed of recycled content and conserve water and electricity through the use of energy efficient fixtures and appliances. Maintaining the indoor environmental quality through the use of low-emitting materials during the construction process was another area that received attention. A focus on LEED education for the building's occupants and a "green" cleaning contract, are expected to provide support for LEED innovation in design credits, Ms. Locklair said.

According to AFCEE Program Manager Mr. David Irwin, achieving LEED certification is often more difficult for older buildings such as Building 171.

"This building is from the 40s so it's not all that sustainable in its original design," Mr. Irwin said. "It's harder to do (get LEED certification) with old buildings."

Restroom renovations, which are being funded by BRAC through a contract with Port San Antonio, began in August and are expected to reach completion in Dec 2010. The redesigned restrooms will incorporate ultra low-flow fixtures, reducing water consumption in the restrooms by up to 50 percent and potentially contributing to credit in the LEED water efficiency category.

There are several considerations that must be taken into account when dealing with a space that is utilized by a diverse group of agencies and organizations.

To ensure that each tenant has a voice in the remodeling efforts, the Building 171 Review Board was established. The board allows representatives from each of the tenant Air Force agencies to provide input on proposed improvements and other topics affecting the building. Should the board vote to approve a proposal, it is then passed on to the Facilities Working Group

(FWG), which is also composed of representatives from each agency. The FWG has authority to approve some items, while items of higher magnitude are passed to the Facilities Council which is comprised of the commanders from the tenant agencies. Representatives from Lackland AFB and Port San Antonio are involved at all levels of the approval process.

"All agencies have a chance to comment on the ideas and provide their input," Built Infrastructure Branch Chief Mr. Gene Mesick said. "It's like a homeowners' association."

Some of the topics the board has tackled include establishing standards for exterior and common area furniture and building signage.

"We're trying to control the design standards," Mr. Mesick said. "We want there to be some uniformity on the site, and of course in the common areas. We don't want a hodge-podge of different tenants buying different things."

TDBS is developing a design guide which will provide the specifications for items such as benches, chairs and tables, Mr. Mesick said. This guide would enable the various agencies to choose appropriate items as funding becomes available.

Besides establishing standards, the board members have also impacted the selections for the bathroom renovations and are garnering support within their agencies to help achieve LEED certification.

"It (achieving LEED certification) takes the hard work of the entire team," Ms. Locklair said. "It is all part of a team effort between the designer, contractor, builder and occupants."

AFCEE's interest in sustainability is not planned to end with LEED certification. The current sustainability features that have been incorporated into the renovations are just the beginning of what AFCEE hopes to integrate into the building.

TDBS was chartered by AFCEE Director Mr. Dennis Firman to look at potential enhancements to the building.

"He gave us a vision to improve the quality of life and improve the sustainability (for Building 171)," Mr. Reber said. "It culminated in the workshop at the Port of San Antonio in January. The initial state (of the building) is not the end state. "

In January 2010, staff from Port San Antonio, Lackland and Randolph Air Force Bases, and personnel



Conceptual representation of proposed gathering and seating areas outside of Building 171.

from other AFBs around the world, participated in a design planning session (also known as a charette) at the Port to identify and test sustainability features that could potentially be incorporated into Building 171. Many short and long-term projects were considered at the charette to make the property more sustainable and to increase the quality of life for its inhabitants, Mr. Reber said.

Some of the short-term proposals being considered include landscaping enhancements, as well as visual buffers.

"We're looking at adding a pedestrian pathway around the building, constructing a bus stop, outdoor gathering spaces, a buffer between the railroad and parking lots and adding more trees to the parking lot," Mr. Christopher Caillier, TDBS architecture student intern, said. "These are the pieces of the vision. As we move forward we can do severable chunks of the smaller projects and eventually get to what this (the building) could be in the future."

Long term design concepts considered for the next five to ten years include potentially adding shaded structures for parking, replacing the existing roof with a high performance roof system, creating an outdoor eating area near the proposed cafeteria, creating an energy display in the building and installing a water collection system.

Even further into the future are the possibilities of installing an off-site pedestrian network and testing examples of alternative energy technologies on site. Testing alternative energies locally would not only promote sustainability on the site itself, but also allow others to learn more about the science behind the solutions.

"We have customers here (at Building 171) all the time that come to do business," Mr. Shierk said. "As part of that, they could see the sustainability projects we are working on. The ones that work, the ones that don't."

AFCEE's ultimate goal is for Building 171 to be a model of sustainability for the Air Force and the world.

"We have a vision toward continual improvement and sustainability is the center of our excellence," Mr. Firman said. "We couldn't just move here and say 'that's over with'. If we're going to lead sustainability for the Air Force, we've got to demonstrate it in the place we live in and we have to have a plan to make it continually more sustainable." □

AFCEE Colorado office streamlines processes and strengthens customer service

By Jennifer Schneider

An AFCEE field office was established at Peterson AFB in Colorado Springs this past April, the result of AFCEE's ongoing commitment to customer relations and efficiency. The office is co-located with the Army Corp of Engineers Resident Engineer.

Within 70 miles of the new office reside twelve military construction (MILCON) projects worth over \$200M, as well as numerous projected vertical sustainment, restoration and maintenance (SRM), and environmental restoration projects. The United States Air Force Academy (USAFA), Peterson Air Force Base (AFB), Schriever AFB, Cheyenne Mountain Air Force Station and Buckley AFB are all situated in the Colorado Springs and Denver areas. The large concentration of projects in this relatively small area made it beneficial for AFCEE to attain a more pronounced presence there.

"There is a very unique concentration of Air Force assets and bases in the Colorado Springs area," Mr. Randall Lierly, AFCEE Eastern Environmental Programs (EXEC) branch chief said. "This (the new office) is a reflection of our efforts to improve and provide a better level of support."

Prior to the launch of the new office, AFCEE had supported the area with multiple project managers assigned by major command (MAJCOM) and base. Establishment of the field office allows AFCEE to optimize the use of available temporary duty (TDY) time and funds, as well as more efficient use of manpower.

Mr. Lierly believes having a local presence has increased customer interaction and allowed AFCEE to be involved in all levels of the project.

"By having a presence there, customers can feel more comfortable with us overseeing their programs and executing work," Mr. Lierly said. "We can be more involved in the planning and help them with the process."

Mr. Gary Maher, Headquarters Air Force Space Command (HQAFSPC) division chief, said feedback on the remote office has been positive.

"AFSPC installations are using the local AFCEE office at Peterson AFB, and the feedback from our wings is that they are benefitting from the local AFCEE support," Mr. Maher said.

Mr. William Kivela, an AFCEE EXEC project manager, was hired in July 2009 to spearhead the stand-up of the new office, as well as to manage local environmental projects with a "boots on the ground" approach. He possessed 14 years of previous project management at AFCEE, before accepting a position at Schriever AFB. Mr. Kivela rejoined AFCEE in July 2009, and telecommuted prior to obtaining the current office space.

In addition to Mr. Kivela, AFCEE Construction Programs (EXH) project manager Mr. Russ Henderer joined the office in April to handle management of local MILCON projects, including the upcoming construction of the new Center for Character and Leadership Development (CCLD) for the USAFA, a \$27.6 million project.

Mr. Bob Barrish, a program manager in the AFCEE Capital Investment Management Central branch (CMC), joined the Colorado team in August. His previous experience as the Chief of Design and Construction at Schriever AFB, as well as his four years as a staff member at AFSPC/A7, made him uniquely qualified for the position. He has long-established working relationships with the engineering professionals at Schriever AFB, Peterson AFB, and Buckley AFB.

AFCEE Director Mr. Dennis Firman, AFCEE Capital Investment Execution Division Chief Mr. Terry Edwards, AFCEE Construction Programs Section Chief Mr. Benjamin Kindt, and Mr. Lierly traveled to the area May 26 to tour the newly established office and meet with local base officials at the surrounding Air Force bases.

"They wanted to see all of the ongoing projects and meet with the base and MAJCOM leadership," Mr. Kivela said. "It is great that they took the time in their schedules to come out. It was very well received by people here."

The visit was symbolic of AFCEE's continued efforts to provide quality service and focus on customer attention, an effort that is inherent throughout all levels of the organization.

"We will continue our commitment to the customers we have established in Colorado," Mr. Lierly said. "We will continue to improve our level of support and look forward to being involved in future planning and execution projects." □

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Environmental remediation, such as the landfill remediation at Barter Island in Alaska, can be impacted by such challenges as remote locations and harsh weather conditions. To ensure that Remedy in Place/Response Complete goals are met for such sites, a watch list has been developed for targeted tracking and oversight. (Photo courtesy of Don Buelter, AFCEE/ERC Program Manager. See story on page 24).